

## ABSTRACT OF THE DISCLOSURE

An all-fiber optical depolarizer is provided in which polarized light is controllably injected into a polarization beam splitter at a  $45^\circ$  angle. The beam splitter is combined with a loop made of standard non-birefringent fiber through which one of the polarizations split by the beam splitter circulates. The loop has a length greater than the coherence length of the light source. The interaction of the beam splitter and the loop produces incoherent depolarized light at the output transmission port of the beam splitter.

5